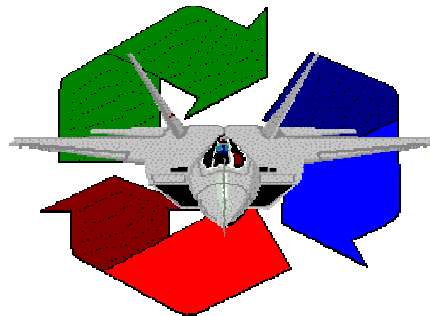


Secretary of Defense Environmental Security Award

Award Category Recycling—Individual

Nominee
Mr. William R. Meinerding



BACKGROUND

**Mr. William R. Meinerding, Solid Waste Program Manager
United States Air Force, Air Force Materiel Command
88th Air Base Wing, Office of Environmental Management
Wright-Patterson Air Force Base, Ohio**

Wright-Patterson Air Force Base Area B



Wright-Patterson Air Force Base near Dayton, Ohio, is one of the nation's most important military installations. The base is headquarters for vast, worldwide logistics systems and is the foremost research and development center in the U.S. Air Force. More than 125 organizations representing a broad spectrum of Air Force and Department of Defense (DOD) activities are located at Wright-Patterson. The base is one of the largest,

most diverse and organizationally complex in the Air Force and can be compared to a large industrial park or medium sized community; its replacement value tops \$8.3 billion. Approximately 21,000 military and civilian government employees work at Wright-Patterson, making it the largest employer in the state at a single location and the largest employer among U.S. Air Force bases worldwide.

The 88th Air Base Wing, part of Aeronautical Systems Center (ASC), supports and maintains the 8,145 acre Wright-Patterson complex of 1,600 buildings, which includes 2,400 housing units. Besides ASC as host, Wright-Patt has such high-visibility tenant units as Headquarters, Air Force Materiel Command (AFMC); the Air Force Institute of Technology; the National Air Intelligence Center (NAIC); multiple Technology Directorates of the Air Force Research Laboratory (AFRL); and an active flightline with the Air Force Reserve's 445th Military Airlift Wing's C-



Wright-Patt Flightline

141s. The 88th Air Base Wing Office of Environmental Management (EM) has total responsibility for all environmental programs on Wright-Patterson AFB and at its satellite facilities.

POSITION DESCRIPTION

Mr. Bill Meinerding, in his position as Solid Waste Program Manager, is responsible for the Wright-Patterson AFB Qualified Recycling Program (QRP). One of Mr. Meinerding's key responsibilities includes management of day-to-day recycling operations that support all host base activities, the high-tech AFRL R&D complex, an active flightline, and the 125 separate organizations that call Wright-Patt home. Additionally, Mr. Meinerding also leads the program coordination with other base agencies and local communities and develops innovative, cost-effective recycling opportunities. Besides these hands-on roles, Mr. Meinerding's responsibilities include planning, programming, and budgeting for the recycling program; tracking the program's progress in meeting Air Force recycling goals; and contributing to *The Wright Stewards* environmental newsletter and the EM organization's web site. Bill is also challenged with developing and executing a comprehensive outreach/partnering program with other DOD



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components, federal, state and local regulatory agencies, and the local Miami Valley communities in which Wright-Patt plays such a large leadership role.

ACCOMPLISHMENTS

Mr. Meinerding manages a complex recycling program with multiple components. The major recycling activities include: (1) curb-side recycling in the 2,400 unit base housing community in three geographically separated areas of two different counties, (2) yard waste recycling through a cooperative agreement with local communities, (3) industrial/facility waste recycling, (4) materials reuse through waste minimization in industrial operations, (5) affirmative procurement, and (6) communication, training, community outreach, and partnering with public and regulatory agencies. The types of solid waste recycled at one of the largest Air Force installations in the world include a wide variety of materials such as paper, cardboard, metal, plastics, glass, batteries, yard waste, and used motor oil, along with one of a kind and unique items from the high-tech Wright-Patt community. In 1998 alone, Mr. Meinerding's enthusiasm, innovation, and leadership skills resulted in the recycling of 9,350,000 pounds of material. This record amount netted over \$470,000 in cost avoidance and diverted 30 percent of the municipal solid waste (MSW) stream from landfill disposal to beneficial use -- exceeding the Air Force goal for that year by 25 percent. The cost avoidance and increase in the amount of the base solid waste stream recycled demonstrates a

significant improvement since program initiation and will serve as a solid bench-mark for the next millennium.

To gain greater acceptance by the 21,000 Wright-Patt personnel and encourage more participation in the base recycling program, Bill initiated "Operation Blue Bin". In this effort, blue recycling containers manufactured from recycled plastics were distributed to base housing residents and the military, civilian, and contract labor force all across Wright-Patt. The blue bins serve as a "user-friendly" and highly visible mechanism for all Wright-Patt people to use in their first-line recycling efforts. The bins serve as handy and easy-to-use receptacles for a variety of recyclable materials in the housing areas and for paper in the work areas. This continuing project has now distributed over 20,000 bins across Wright-Patt, with a one-day distribution record of over 4,000 bins distributed during Earth Day activities. Through Mr. Meinerding's initiative, the workplace paper collection effort has grown from collecting white copy paper only to collecting all grades of paper. The first full year of operation realized a 10 percent increase in the quantity of Grade I paper diverted into the recycling program. After including all grades of paper in the program, the amount of low grade paper recycled has increased from 28,000 pounds per year for the first year of the program to 250,000 pounds per year for Fiscal Year 1999, an increase of 790%.

Operation Blue Bin



Blue Bin Recycle Container Locations



Work Areas



Base Housing Curbside

Wing HQ Uses Mini Bins

To further emphasize the use of the blue recycle bins and to focus people's attention on source reduction, Mr. Meinerding initiated a pilot "Mini Bin" program. In this pilot test, very small wastebaskets (or mini bins) made from recycled materials were placed on people's desktops to serve as their sole waste



receptacle for their work area. These mini bins helped to make the workforce aware of the amount of material they discard during the course of business and served as a reminder to use their blue recycling bin for as much material as possible. Bill's mini bins allow people to make a personal commitment to source reduction -- the highest level of the recycling hierarchy. One of the first Wright-Patt locations to use the mini bins was Building 10, the 88th Air Base Wing headquarters building, with its most enthusiastic and public supporter being the wing commander, Colonel Michael Collings. As an example of the type of "outside the box" thinking by Mr. Meinerding, he conducted pilot tests to educate office workers on the effectiveness of mini bins for reducing waste. One test he conducted in a 65-person ASC office showed the following results from a waste audit:

ASC Mini Bin Pilot Test Condition	Total Waste Collected	Recyclable Material in Waste
Before mini bin use	118 pounds/week	34 pounds/week
After 30 days of mini bin use	76 pounds/week	7 pounds/week
Percent Reduction (after 30 days)	36 %	80 %

Based on Bill's testing, this single office reduced its total waste disposal amount by 36%, decreased the amount of recyclable material discarded by 80%, and increased the amount of material recycled by 27 pounds per week, almost 1,500 pounds per year. These amounts are above and beyond the amount of materials normally recycled but are typical of the work locations that use the mini bins. Use of this simple container is evidence of the cooperative spirit engendered in the Wright-Patt workforce through Mr. Meinerding's public outreach and educational efforts.

New Recycling Facility



Mr. Meinerding's foresight recognized that to make the step from a good recycling program to that of a recycling leader, the Wright-Patt Recycling Center had to be improved and modernized. His study and analysis of the base recycling program's current capabilities and projections of what was needed in the future resulted in the addition of new and improved recycling technologies and processes to the base Recycling Center. Mr. Meinerding's improvements included installation of a Materials Recycling Facility (MRF), glass crushers, and a

new aluminum can densifier.

As part of this upgrade, Bill also led the effort for the design and construction of an addition to the base recycling facility, which makes Wright-Patt's facility the most modern of its type in the area. The newly renovated facility now boasts a modern conveyor system that improved working conditions for the employees and facilitates sorting of recyclable materials.

Old Recycling Facility

By contrast, in the old facility, trash was simply dumped on the floor requiring workers to “wade in” to the waste pile. The new system has greatly enhanced unit productivity, improved overall processing effectiveness and efficiency, and increased the return on investment for the recycling program.

With the MRF, Wright-Patt increased from 5 to 8 the number of different waste streams it can collect for recycling. This increase means that they can now capture more of the solid waste stream for recycling instead of disposing of it in a landfill.



HQ AFMC presented Mr. Meinerding with a unique challenge -- large, 300 pound lead acid storage batteries used as a backup to the computer system. These batteries were identified for disposal, but Bill conducted



research and identified a vendor willing to accept the unique waste batteries for recycling. Mr. Meinerding's efforts resulted in the diversion of 196,000 pounds of lead acid batteries from the hazardous waste stream, subsequent avoidance of \$140,000 in disposal costs, and netted more than \$6,000 to support base activities. While this recycling effort was a one-time event, it shows how Bill is able to provide quick response to avoid costly and unnecessary waste disposal.

Lead Acid Batteries To Be Recycled

Troubled by the lack of a base oil-recycling program, Mr. Meinerding took the lead to acquire the necessary materials and build a used oil recovery center through the base self help program. To support the program and encourage base oil recycling, Bill procured and distributed drain-pan containers to residents of base housing areas and put together an aggressive educational and public awareness blitz. Based on the well-thought out nature of the plan and a simple, but effective execution of the effort, the new oil recovery operation captured over 36,000 gallons of used oil for recycling instead of disposal in household waste or introduction into the environment.



Headlines for Oil Recycling Program

Recognized for his inventiveness and responsiveness, HQ AFMC asked for his assistance with a growing problem of undeliverable, third class mail in the AFMC headquarters complex on Wright-Patt. With approximately 1,500 personnel in a busy office environment, undeliverable third class mail presented an ominous solid waste problem. Bill assessed the problem, developed a solution, and implemented a program to recover and recycle this particular material, diverting 104,000 pounds of it from the waste bin into the recycling program.

Realizing that Wright-Patt could profit from managing its own scrap metal sales, Bill initiated a request for and received the authority from the three star ASC Commander for direct sales of scrap metals. With this authority, Mr. Meinerding became the selling agent for scrap metals -- able to find vendors, negotiate prices, and hold material to maximize revenue and sales price. The direct authority gives Wright-Patt the incentive to recycle as much material as feasibly possible since the additional revenues revert back to the Qualified Recycling Program and benefit base Quality of Life Programs. The increased revenues indicate how well Bill's initiative worked. As a result of direct sales, revenue doubled to over \$349,000 the first year of implementation.

Mr. Meinerding initiated Wright-Patt's "Return to Manufacturer" program for excess Hazardous Materials. As an example of the impact this program can have, the initial effort returned twelve compressed refrigerant cylinders to a local vendor, avoiding hazardous waste disposal costs of over \$18,000 and generation of 800 pounds of hazardous waste.

Metals Recycling



Kans for Kids Program



Bill's contribution to the base and local community included a successful "Kans for Kids" aluminum can recycling campaign held for two consecutive years in 1998 and 1999. This community activity collected almost 14,000 pounds of cans that were baled and stacked in the shape of a Holiday Tree at one of Wright-Patt's main entrances. This structure not only

provided an extremely visible symbol of the holiday season, but also quantified the amount of aluminum cans

collected and recycled on Wright-Patt. Placed by one of the main entries to the base, approximately 40% of the people entering and leaving the base daily saw and associated the structure with aluminum cans, material source reduction, recycling efforts, and cash benefits to base programs. Proceeds from the subsequent sale of the aluminum benefited a wide range of children's programs across Wright-Patt. These types of visible efforts on Bill's part have served to institutionalize recycling considerations and emphasis across the base population.

Bill is justifiably proud of Wright-Patt's recycling program and has opened his operation to community involvement and education. He held an open house at the base recycling center in conjunction with Earth Day '98, provided educational programs and tours for local schools and youth groups, and hosted a tour of the Wright-Patt Recycling Center for the National Recycling Coalition annual fall meeting. Additionally, he has hosted the HQ AFMC Environmental Management leadership for tours and recycling technology transfer across Air Force Materiel Command, with some of the largest industrial operations in DOD.



Mr. Meinerding is keenly aware of the fact that recycling is only part of the waste minimization process. To enhance the recycling program Bill also focused on selected source reduction efforts. As an example, Bill was instrumental in implementing a pollution prevention project at the National Air Intelligence Center that reduced hazardous materials use associated with film processing by 21 percent. This project, which replaced wet chemical film processing with digital imaging equipment, was executed in a facility that has some of the highest security in DOD and required Bill's thorough planning and implementation skills.

Terms of the Wright-Patt refuse collection and disposal contract called for the base to be billed based on the presumptive amount of refuse in waste containers -- potential volume instead of actual tonnage. Bill's knowledge of the solid waste program identified this as a problem and an opportunity to save scarce O&M dollars. Taking the lead, Bill had the contract renegotiated to bill the base based on actual waste tonnage. This simple concept reduced Wright-Patt's cost of refuse collection and disposal by \$250,000 per year.

Mr. Meinerding developed the Wright-Patt Affirmative Procurement Management Plan which incorporated Affirmative Procurement information into the user-friendly 88th Air Base Wing Environmental Management web site. The web site provides lists and links to environmentally preferable products and makes Affirmative Procurement information available to the entire Wright-Patt population through base Intranet system. However, some of Bill's Affirmative Procurement efforts are "out of the

Playground Surface Made from Recycled Materials



ordinary". Part of the proceeds from the recycling program went to the purchase and installation of playground equipment for base children. Bill pioneered the purchase of playground cover material made from recycled tires to place under and around the equipment. As a result of the success of this cover material, Bill encouraged and assisted the Wright-Patt Security Police to purchase and install the same material at three training sites.

To further strengthen the Affirmative Procurement Program, Mr. Meinerding obtained the support of the senior base leadership and base population for "America Recycles Day" activities. The local base newspaper, the *Skywrighter*, covered the activities and provided useful information to the base population on affirmative procurement.

Additionally, Bill worked with ASC contracting and the Base Civil Engineer to develop and insert Affirmative Procurement language in contract documents. Leading by example, Mr. Meinerding ensured that all containers used in the recycling program are made from recycled materials. This effort includes the blue bins, mini bins, oil containers and other assorted items -- over 22,000 items that support affirmative procurement at Wright-Patt.



Affirmative Procurement Publicity

Bill Meinerding and the staff of the base recycling center frequently provide educational outreach and recycling information to Wright-Patterson AFB personnel and the surrounding community. Wright-Patt's senior leaders believe that reaching "outside the fence" is a logical extension of the Wright-Patt mission to ensure that the base and surrounding communities are provided a healthier place to live and work.



Mr. Meinerding with community outreach and educational programs.

Bill has presented technical papers on the progress and technical aspects of the Wright-Patt recycling programs at annual meetings of the National Recycling Coalition (NRC). Based on the excellence of his presentations, the NRC made special arrangements to have NRC members meet Bill and tour the Wright-Patt Recycling Facility as an example of what can be accomplished with a recycling program. Bill serves on two local environmental groups: (1) the Ohio/DOD Pollution Prevention Partnership, a collaborative group of large federal facilities partnering with the Ohio Environmental Protection Agency and the U.S. Environmental Protection Agency, and (2) Adopt-A-River, the local community river corridor cleanup group that conducts an annual litter

removal campaign for five area rivers. Mr. Meinerding also represents Wright-Patt as a voting member of the Greene County, Ohio Recycling Committee that provides recycling program decisions and policy that affect the Greene County population of over 150,000 people.

AWARDS AND SERVICES



Bill Meinerding (second from left) accepting recycling award from Ohio Sportsmen and National Wildlife Federation.



Announcement of the 1998 Litter Prevention and Recycling Conservationist Award presented to the Wright-Patterson AFB Recycling Program.

Mr. Meinerding's pioneering efforts and community involvement have not gone unnoticed in the state of Ohio. In recognition of its excellent programs and due largely to Bill's efforts, the Wright-Patt Recycling Program received the 1998 "Litter Prevention and Recycling Conservationist Award" presented jointly by League of Ohio Sportsmen and the National Wildlife Federation. Wright-Patt won this award, the only one presented in the state, for the successful completion of the first Kans for Kids campaign which collected, recycled, and removed from the waste stream, over 200,000 cans. An additional basis for the award was the innovative use of alternative materials for non-traditional use, a specific highlight of Bill Meinerding's leading edge thinking, planning, and program execution.



Mr. Meinerding receives a Certificate of Achievement from Col. Mike Collings, 88th Air Base Wing Commander, for his program achievements and positive ECAMP findings from Air Force Materiel Command.

Besides recognition from statewide public groups, Air Force Materiel Command also recognized Mr. Meinerding's recycling program successes. The February 1998 AFMC external Environmental Compliance Assessment and Management Program

(ECAMP) Final Report noted two positive findings in recycling. Specifically, this intense environmental compliance audit looking for regulatory violations praised recycling program for its innovative reward incentive program to encourage and enhance

curbside recycling participation in the military family housing. This incentive program is another example of the continuing emphasis placed on visibility of the recycling program and participation by all Wright-Patt civilian, military, contractor personnel and base housing residents.

SUMMARY

Bill Meinerding has provided an outstanding service to Wright-Patterson AFB and the surrounding community with the successes he has made with the recycling efforts on and off base. He has been an untiring advocate for source reduction, reuse, and recycling across the Wright-Patt complex and housing areas -- identifying, implementing, and executing a myriad of activities to highlight and foster the recycling emphasis for a community of over 21,000 people as well as the surrounding communities and across the state of Ohio. Mr. Meinerding has made a difference --his attitude, spirit, and enthusiasm generated a change in how things are done and put the recycling program of Wright-Patterson AFB on the road to acknowledged leadership.